

<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional) 54084-47038	
I hereby certify that this correspondence has been electronically filed with the U.S. Patent and Trademark Office via the EFS Web on <u>November 7, 2008</u>		Application Number 10/820,330	Filed 4/8/2004
Signature <u>Joseph M. Rolnicki</u>		First Named Inventor Scheller, Gregg D.	
Typed or printed name <u>Joseph M. Rolnicki</u>		Art Unit 3743	Examiner Dowe, Katherine Marie

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

☒ attorney or agent of record.

Registration number 32653

☐ attorney or agent acting under 37 CFR 1.34.

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NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☒ \*Total of 1 forms are submitted.

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Joseph M. Rolnicki  
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Reg. No. 32,653

In re application of: Scheller et al.	:	Examiner: Dowe, Katherine Marie
	:	
Serial No.: 10/820,330	:	Group Art Unit: 3734
	:	
Filed: April 8, 2004	:	
	:	
For: SURGICAL INSTRUMENT	:	
CONSTRUCTED BY ELECTRIC	:	
DISCHARGE MACHINING	:	
	:	

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Applicant requests that the Final Rejection of claims 25-42, 47, 48, 51, and 52 made in the Patent Office Action having a notification date of August 7, 2008, be reviewed.

Claims 25-34, and 36-42 were rejected as being obvious under 35 U.S.C. § 103(a) in view of the disclosure of the U.S. Patent of Farzin-Nia No. 5,588,832. Of these rejected claims, claim 25 is the only independent claim. Claim 25 recites a microsurgical instrument comprising first and second operative microsurgical surfaces, means for moving the first and second microsurgical surfaces toward and away from each other, and at least one of the microsurgical surfaces having a series of serrations with each serration having adjacent peaks and a width dimension between the adjacent peaks that is smaller than 0.007 of an inch.

Claim 25 recites a microsurgical instrument having operative microsurgical surfaces. The application specification defines a microsurgical instrument as "a surgical instrument that is constructed in an extremely small scale for use in microsurgery" (see specification page 1, lines 3-4) and as "surgical instruments employed in performing

surgical operations on extremely small and extremely delicate parts of the human anatomy, for example the tissues inside the human eye" (see specification page 1, line 12-page 2, line 2). The specification also defines microsurgical instruments where "the scale of the instrument be as small as possible so that the introduction of the instrument to the surgical site is minimally invasive" (see specification page 2, lines 11-13). Furthermore, "microsurgery" is defined as any of various surgical procedures performed under magnification and with small specialized instruments, permitting very delicate operations, as the reconnection of severed blood vessels and nerves ("microsurgical," Dictionary.com Unabridged (v. 1.1). Random House, Inc. 06 Nov. 2008. <Dictionary.com/http://dictionary.reference.com/browse/microsurgical>.

The applicants discovered that a microsurgical instrument having a serrated operative microsurgical surface could be created by using electric discharge machining (EDM) to make the extremely small serrations on the operative surfaces of the instrument. In addition, the applicants discovered that no further machining of the extremely small serrations would be needed after the operative microsurgical surfaces were formed by EDM. These discoveries are not made obvious by the prior art references of record.

The Farzin-Nia reference does not disclose a microsurgical instrument. The reference discloses an instrument that is made from raw materials that are difficult to machine, such as round bar stock. The round bar stock is rolled or otherwise deformed to have flat sides and rounded edges (see the Abstract). The bar stock is cut as shown in Figure 3A of the reference to form a plurality of blanks 23, 24. The reference discloses the blanks being cut from the bar stock by EDM, laser cutting, or other techniques. Two of the blanks 23, 24 cut from the bar stock are then further formed or machined to produce the two handles and jaws of a pliers 70. The two parts that make up the pliers 70 are connected by a pin 64 to form a hinge 62 between the two parts.

There is no suggestion in the Farzin-Nia reference of a microsurgical instrument having an operative microsurgical surface with a series of serrations, with each serration having adjacent peaks and a width dimension between the adjacent peaks that is smaller than 0.007 of an inch as recited in claim 25. The reference only

discloses using EDM to cut bar stock into initial blanks, where two of the blanks cut are then machined further to form jaws of a pliers.

Because the pliers of the Farzin-Nia reference are not microsurgical instruments as claimed and as defined in the specification, there is no need for the pliers to have the extremely small width dimensions of the serrations set forth in claim 25. Providing the pliers of the reference with the serration dimensions claimed would therefore not be obvious.

Furthermore, in the rejection of claim 25 it is acknowledged that the Farzin-Nia reference does not disclose the specific dimensions of the serrations set forth in the claim. In the rejection, it is contended that it would be obvious to modify the device of Farzin-Nia with the serration dimensions "since the device is formed by wire electric discharge machining (column 3, line 63), and it has been held that where the general conditions of a claim are disclosed in the prior art, discovering optimum or workable ranges involves only routine skill in the art." *In re Aller*, 105 U.S.P.Q. 233 is cited for support of this contention. However, the *Aller* situation involves changes in temperature and/or concentration in a chemical process. This is not pertinent to the discovery of using electric discharge machining to produce extremely small serrated edges on a microsurgical instrument as claimed.

The Farzin-Nia reference discloses pliers requiring the application of at least moderate force by the user, and in certain situations requiring exertion of considerable force by the user's hand (see column 1, lines 33-39 of the Farzin-Nia reference). In a pliers such as that disclosed by the Farzin-Nia reference, reducing the size of the serrations to fall within the range of claim 25 would not optimize the functioning of the pliers. The pliers are not a microsurgical instrument as claimed and as defined in the application specification. Reducing the size of the serrations on the orthodontic pliers into the range of claim 25 would have no affect on the pliers' ability to exert moderate to considerable force from the user's hand. Providing the pliers of the Farzin-Nia reference with serrations having the extremely small width dimensions set forth in Claim 25 could result in at least some of the serrations being deformed when the moderate to

considerable force is exerted on the operative microsurgical surfaces by the user's hand. Such a modification would not be obvious.

In contrast, the serrations on the operative microsurgical surfaces of the invention are employed in extremely delicate surgical procedures that do not involve a moderate to considerable force being applied to the microsurgical instrument by the user's hand. In use of a microsurgical instrument, the surgeon typically manipulates the instrument using only the thumb and forefinger of the surgeon's hand and does not exert a moderate to considerable force on the instrument.

To modify the Farzin-Nia pliers in the manner suggested in the Final Rejection would not be obvious, and the rejection is based on hindsight of the present invention. The rejections of claims 25-34, and 36-42 should therefore be withdrawn and the claims allowed.

Claims 35, 47, 48, 51, and 52 were rejected as being obvious under 35 U.S.C. § 103(a) in view of the disclosures of the Farzin-Nia reference, and the disclosure of the U.S. Patent of Toth et al. No. 5,584,845 [sic] 6,616,683. In this rejection it is acknowledged that the Farzin-Nia reference does not disclose the specific claimed dimensions of the serrations of the invention. It is contended that it would be obvious to modify the Farzin-Nia pliers with the claimed serration dimensions "since the device is formed by wire electric discharge machining (column 3, ln. 63) and it has been held that where the general conditions of a claim are disclosed in the prior art, discovering optimum or workable ranges involves only routine skill in the art." *In re Aller*, 105 U.S.P.Q. 233 is again cited for support of this contention.

Of the rejected claims, claim 35 depends from independent claim 25 discussed above. Claim 47 is an independent claim and claim 48 depends from claim 47, and claim 51 is an independent claim and claim 52 depends from claim 51.

Claims 35, 47 and 51 recite a microsurgical instrument comprising an elongate rod having opposite proximal and distal ends, with a slot in the rod distal end forming a pair of resilient spring arms projecting from the rod. Claim 35 recites the pair of arms connecting the pair of forceps jaws to the rod. Claims 47 and 51 recite a pair of operative microsurgical surfaces on the pair of spring arms, with the microsurgical

surfaces having opposed serrations with width dimensions between adjacent peaks of the serrations that are smaller than 0.007 of an inch. In the rejection of these claims, it is contended that the Toth reference discloses electric discharge machining used to form a slot in a rod to separate operative surfaces as resilient spring arms. It is then further contended that it would be obvious to modify the Farzin-Nia device "such that a single rod with a longitudinal slot was used to form the rod and jaw portions of the device."

For the same reasons discussed above with regard to the rejection of claim 25, there is no reason for modifying the jaws of the Farzin-Nia pliers with serrations having the dimensions recited in claims 47 and 51. Furthermore, there is no reason for modifying the pliers of the Farzin-Nia reference with a pair of resilient arms that project from a rod as recited in claims 35, 47 and 51. The Farzin-Nia reference discloses a pair of pliers having jaws that are connected together by a pivot connection. The pivot connection enables the application of at least a moderate force by the user, and in certain situations exerting a considerable force by the user's hand (see column 1, lines 33-39 of the Farzin-Nia reference). Forming the pliers of Farzin-Nia from a single piece of material would eliminate the ability of the jaws of a pliers to pivot relative to each other, and therefore eliminate the ability of the jaws to exert a moderate force by the user. This would eliminate the intended operability of the pliers. Such a modification would not be obvious in view of the disclosures of the two references relied on in rejecting the claims. The rejections are based on hindsight of the present invention and should be withdrawn and the claims allowed.

For all the reasons discussed above, it is respectfully submitted that claims 25-42, 47, 48, 51, and 52 pending in the application are allowable over the prior art.

Respectfully submitted,  
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